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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. CONFIRMATION NO. | |
|---------------------------------|----------------|-------------------------------|--------------------------------------|--------------|
| 09/857,408 | 09/10/2001 | Petrus Antonius Josephina Vos | VOS 2 | 3366 |
| 7 | 590 06/28/2002 | | | |
| Browdy and N 624 Ninth Stree | | | EXAMINER | |
| Washington, DC 20001-5303 | | | SAKELARIS, SALLY A | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1634 | 10 |
| | | | DATE MAILED: 06/28/2002 | (0 |

Please find below and/or attached an Office communication concerning this application or proceeding.



Office Action Summary

| Application No. | | | Applicant(s) | · · · · · · · · · · · · · · · · · · · |
|-----------------|-------------------------|---------------------------------------|--------------|---------------------------------------|
| | 09/857,408 | æ | VOS ET AL. | |
| Examiner | | · · · · · · · · · · · · · · · · · · · | Art Unit | |
| | Sallv A Sakelaris | | 1634 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.

 If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

| - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | |
|--|--|--|--|--|--|
| Status | | | | | |
| 1) Responsive to communication(s) filed on | | | | | |
| 2a) This action is FINAL . 2b) This action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims | | | | | |
| 4)⊠ Claim(s) <u>1-30</u> is/are pending in the application. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | |
| 6)☐ Claim(s) is/are rejected. | | | | | |
| 7) Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) 1-30 are subject to restriction and/or election requirement. | | | | | |
| Application Papers | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | |
| 10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner. | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | |
| 13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | |
| a) All b) Some * c) None of: | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | |
| Attachment(s) | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4) Interview Summary (PTO-413) Paper No(s) 5) Notice of Informal Patent Application (PTO-152) 6) Other: | | | | | |
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Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention(as represented by the groups listed below) to which the claims must be restricted.

Group I, claims 1-14,19, and 29 are drawn to an array for analyzing a nucleic acid sequence and a kit containing this array.

Group II, claims 15-18 are drawn to a method for providing an array of nucleic acid sequences bound to a carrier.

Group III, claims 20-28 are drawn to methods for analyzing a nucleic acid sequence or a mixture of nucleic acid sequences.

Group IV, claim 30 is drawn to non-processed or processed results or data stored on a suitable data carrier.

2. The inventions listed as Groups I-IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The special technical feature of Group I is considered to be an array comprising a carrier and at least two different nucleic acid sequences bound to the carrier wherein each nucleic acid sequence bound to the carrier comprises at least a nucleic acid sequence that corresponds to the

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sequence of a restriction fragment obtainable by restricting a genomic DNA and/or at least one cDNA with at least one frequent cutter restriction enzyme and at least one rare cutter restriction enzyme. However, Cantor et al. teach an array of different nucleic acid probes each containing a constant sequence at the 3'-terminus, another constant sequence at the 5'-terminus, and a random internal sequence between about 3-5 nucleotides in length flanked by the cleavage sites of a restriction enzyme. Furthermore, the reference teaches an array of probes fixed to a solid support and the solid support is selected from the group consisting of plastics, ceramics, metals, resins, gels, membranes, and chips(US6,001,987, 12/1999). As the product of Group I does not represent a contribution over the prior art, the claims lack a special technical feature. Thus, the technical feature linking the recited groups I-IV does not constitute a special technical feature as defined by PCT Rule 13.2, as it does not define a contribution over the prior art.

Furthermore, it is also noted that the particular products that comprise groups I and IV are not joined by a common structure with one another. In this case, the products are each separately drawn to nucleic acid molecules and data stored on a carrier because the arrays are composed of nucleotides, while the data could be stored for example, as a readable format comprised of the computer hardware and software necessary for the manipulation of sequence data digitally. Thus, there is no common structure that joins the particular products that comprise groups I and IV.

Lastly, the claimed methods of Groups II and III have different objectives, require different process steps and require the use of different reagents. The methods of Groups II require the steps of identifying an AFLP-marker, providing a nucleic acid sequence that comprises a restriction fragment corresponding to said AFLP-marker, attaching the nucleic acid

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sequence to the carrier and repeating these steps to build up an array that represents the common technical feature. The method of Group III requires steps of analyzing a nucleic acid sequence or a mixture of nucleic acid sequences, comprising contacting the nucleic acid or mixture under hybridizing conditions with an array that represents the common technical feature. In addition to the differences in objectives, effects, and method steps it is again noted that the claims of the present groups share a common a special technical feature that is not a contribution over the prior art(US6,007,987).

- 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by the different classifications and their divergent subject matter and because these inventions require different searches that are not co-extensive, examination of these distinct inventions would pose a serious burden on the examiner and therefore restriction for examination purposes as indicated is proper.
- 4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).
- 5. Applicant is advised that the reply to this requirement, to be complete, must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Sally Sakelaris whose telephone number is (703) 306-0284. The examiner can normally be reached on Monday-Friday from 8:00AM-5:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W.Gary Jones, can be reached on (703)308-1152. The fax number for the Technology Center is (703)305-3014 or (703)305-4242.

Any inquiry of a general nature or relating to the status of this application should be directed to Chantai Dessau whose telephone number is (703)605-1237.

Sally Sakelaris

CARLA J. MYERS
PRIMARY EXAMINER